

In re: 'Antes et al.
Serial No.: 09/764,500
Filed: January 17, 2001
Page 2 of 17

In the Specification:

Please amend the paragraph beginning on page 1, at line 2 as follows:

The present application is related to commonly assigned and concurrently filed United States Patent Application Serial No. [[____]]09/764,252, entitled "METHODS, SYSTEMS AND COMPUTER PROGRAM PRODUCTS FOR PROVIDING DATA FROM NETWORK SECURE COMMUNICATIONS IN A CLUSTER COMPUTING ENVIRONMENT", ~~Attorney Docket No. 5577-220~~ and United States Patent Application Serial No. [[____]]09/764,790, entitled "METHODS, SYSTEMS AND COMPUTER PROGRAM PRODUCTS FOR PROVIDING FAILURE RECOVERY OF NETWORK SECURE COMMUNICATIONS IN A CLUSTER COMPUTING ENVIRONMENT", ~~(Attorney Docket No. 5577-221)~~ the disclosures of which are incorporated by reference as if set forth fully herein.

filed 1/17/2001
filed 1/17/2001
WRL
5/10/05

failure, to surviving adapters and nodes. This approach allows applications of a failing node to be distributed among surviving nodes, but it may require the monitoring application to have complete knowledge of the application and network adapter topology in the cluster. In this sense, it is similar to existing Systems Management applications such as those provided by International Business Machines Corporation's Tivoli® network management software, but the IP Address Migration Application has direct access to adapters and ARP caches. The application also requires a dedicated IP address for inter-application communication and coordination.

United States Patent Application Serial No. 09/401,419 entitled "METHODS, SYSTEMS AND COMPUTER PROGRAM PRODUCTS FOR AUTOMATED MOVEMENT OF IP ADDRESSES WITHIN A CLUSTER" filed September 22, 1999, the disclosure of which is incorporated herein by reference as if set forth fully herein, describes dynamic virtual IP addresses (VIPA) and their use. As described in the '419 application, a dynamic VIPA may be automatically moved from protocol stack to protocol stack in a predefined manner to overcome failures of a particular protocol stack (i.e. VIPA takeover). Such a predefined movement may provide a predefined backup protocol stack for a particular VIPA. VIPA takeover was made available by International Business Machines Corporation (IBM), Armonk, NY, in System/390 V2R8 which had a general availability date of September, 1999.

In addition to failure scenarios, scalability and load balancing are also issues which have received considerable attention in light of the expansion of the Internet. For example, it may be desirable to have multiple servers servicing customers. The workload of such servers may be balanced by providing a single

now patent no.
US 6430622

note 5/10/05